

**In the Claims**

Claims 1-14 (cancelled).

Claim 15 (previously presented): An adjustable radio frequency identification device for use with a remote interrogator unit, the device comprising:

a monolithic semiconductor integrated circuit having integrated circuitry;  
transmitter circuitry provided on the monolithic integrated circuit and forming at least part of the integrated circuitry;

an antenna electrically coupled to the transmitter circuitry and configured to communicate with the remote interrogator unit; and

at least one of the antenna and the transmitter circuitry having reconfigurable electrical characteristics, the electrical characteristics being reconfigurable to selectively tune the at least one of the antenna and the transmitter circuitry for sensitivity within a range of tuned and detuned states to purposely reduce transmitter range of the device in response to a command from the remote interrogator unit.

Claim 16 (previously presented): An adjustable radio frequency identification device in accordance with claim 15 wherein the transmitter circuitry has at least one circuit with at least one selectively tunable circuit element

electrically reconfigurable to modify the transmission range of the transmitter circuitry.

Claim 17 (previously presented): An adjustable radio frequency identification device in accordance with claim 16 wherein the at least one circuit comprises a plurality of fixed matching networks and circuitry configured to selectively switch one of the fixed matching networks into electrical connection with the transmitter circuitry in order to adjust tuning of the transmitter circuitry and the antenna.

Claim 18 (previously presented): An adjustable radio frequency identification device in accordance with claim 16 wherein the at least one circuit comprises an adjustable circuit element which selectively causes the transmitter circuitry and the antenna to have mismatched impedances.

Claim 19 (previously presented): An adjustable radio frequency identification device in accordance with claim 15 and further comprising receiver circuitry having at least one circuit with at least one selectively tunable circuit element electrically reconfigurable to modify the reception range of the receiver circuitry in response to a command from the interrogator unit.

Claim 20 (previously presented): An adjustable radio frequency identification device in accordance with claim 19 wherein the at least one circuit comprises a plurality of fixed matching networks and circuitry configured to selectively switch one of the fixed matching networks into electrical connection with the receiver circuitry, in response to the command from the interrogator, in order to adjust tuning of the receiver circuitry and the antenna.

Claim 21 (previously presented): An adjustable radio frequency identification device in accordance with claim 19 wherein the at least one circuit comprises an adjustable circuit element which selectively causes the receiver circuitry and the antenna to have mismatched impedances.

Claim 22 (previously presented): An adjustable radio frequency identification device for use with a remote interrogator unit, the device comprising:

an integrated circuit including receiver circuitry configured to receive an interrogation signal from the interrogator unit;

an antenna electrically coupled to the receiver circuitry, the antenna configured to receive the interrogation signal from the interrogator unit and deliver the interrogation signal to the receiver; and

at least one of the antenna and the receiver having reconfigurable electrical characteristics, the electrical characteristics being reconfigurable, in response to a command from the interrogator unit, to selectively tune the at least one of the antenna and the receiver circuitry within a range of tuned and detuned states to purposely reduce a reception range of the device.

Claim 23 (previously presented): An adjustable radio frequency identification device in accordance with claim 22 wherein the receiver circuitry has at least one circuit with at least one selectively tunable circuit element electrically reconfigurable to modify the reception range of the receiver circuitry.

Claim 24 (previously presented): An adjustable radio frequency identification device in accordance with claim 23 wherein the at least one circuit comprises a plurality of fixed matching networks and circuitry configured to selectively switch one of the fixed matching networks into electrical connection with the receiver circuitry in order to adjust tuning of the receiver circuitry and the antenna.

Claim 25 (previously presented): An adjustable radio frequency identification device in accordance with claim 23 wherein the at least one circuit comprises an adjustable circuit element which selectively causes the receiver circuitry and the antenna to have mismatched impedances.

Claim 26 (previously presented): An adjustable radio frequency identification device in accordance with claim 22 and further comprising transmitter circuitry having at least one circuit with at least one selectively tunable circuit element electrically reconfigurable to modify the transmission range of the transmitter circuitry, in response to a command from the interrogator unit.

Claim 27 (previously presented): An adjustable radio frequency identification device in accordance with claim 26 wherein the at least one circuit comprises a plurality of fixed matching networks and circuitry configured to selectively switch one of the fixed matching networks into electrical connection with the transmitter in order to adjust tuning of the transmitter circuitry and the antenna.

Claim 28 (previously presented): An adjustable radio frequency identification device in accordance with claim 26 wherein the at least one circuit comprises an adjustable circuit element which selectively causes the transmitter circuitry and the antenna to have mismatched impedances.

Claim 29 (previously presented): A method of adapting a radio frequency identification device for use with a remote interrogator unit, the method comprising:

providing transponder circuitry;

providing an antenna electrically coupled to the transponder circuitry for communicating with a remote interrogator unit; and

selectively tuning at least one of the antenna and the transponder circuitry within a range of tuned and detuned states to purposely reduce sensitivity responsive to an interrogation signal transmitted by the interrogator unit.

Claim 30 (original): The method of claim 29 wherein the step of selectively tuning comprises configuring electrical conduction of the transponder circuit.

Claim 31 (original): The method of claim 29 wherein the transponder circuit is selectively tuned by electrically switching in one or more of a plurality of fixed circuit networks for realizing the desired receiver sensitivity of the communication device.

Claim 32 (original): The method of claim 29 wherein the transponder circuit includes a circuit network, the method further including the step of selectively tuning the circuit network.

Claim 33 (original): The method of claim 29 wherein the transponder circuit comprises a receiver circuit, and the step of selectively tuning comprises detuning the receiver circuit.

Claim 34 (original): The method of claim 29 wherein the transponder circuit comprises a transmitter circuit, with the step of selectively tuning comprising detuning the transmitter circuit.

Claim 35 (previously presented): A radio frequency identification device operating method comprising:

providing an active transmitter electrically coupled to an antenna, the transmitter defining at least a portion of a monolithic RFID integrated circuit configured to communicate with a remote interrogator; and

selectively tuning at least one of the antenna and the transmitter to a state selected from a range of tuned and detuned states to purposely reduce a transmitter range in response to a command transmitted by the interrogator unit.



Claim 36 (previously presented): The method of claim 35 wherein the transmitter has at least one circuit with at least one selectively tunable circuit element electrically reconfigurable to modify the transmission range of the transmitter.

Claim 37 (previously presented): A radio frequency identification device fabrication method comprising:

electrically coupling an active transmitter to an antenna, the transmitter defining at least a portion of a monolithic RFID integrated circuit configured to communicate with a remote interrogator; and

wherein the transmitter is configured to be selectively tuned to a state selected from a range of tuned and detuned states to purposely reduce a transmitter range, the selectively tuning including providing a plurality of fixed matching networks and circuitry configured to selectively switch one of the fixed matching networks into electrical connection with the transmitter, in response to a command transmitted by the interrogator unit, in order to adjust impedance matching between the transmitter and the antenna.

Claim 38 (previously presented): The method of claim 36 wherein the at least one circuit comprises an adjustable circuit element which selectively causes the transmitter and the antenna to have mismatched impedances.

Claim 39 (previously presented): The method of claim 35 wherein the RFID integrated circuit comprises a receiver having at least one circuit with at least one selectively tunable circuit element electrically reconfigurable to modify the reception range of the receiver.

Claim 40 (previously presented): The method of claim 39 wherein the at least one circuit comprises a plurality of fixed matching networks and circuitry configured to selectively switch one of the fixed matching networks into electrical connection with the receiver in order to adjust tuning of the receiver and the antenna.

Claim 41 (previously presented): The method of claim 39 wherein the at least one circuit comprises an adjustable circuit element which selectively causes the receiver and the antenna to have mismatched impedances.

Claims 42-53 (cancelled).

Claim 54 (previously presented): An adjustable radio frequency identification device for use with a remote interrogator unit, the device comprising:

a monolithic semiconductor integrated circuit having integrated circuitry;  
transmitter circuitry provided on the monolithic integrated circuit and  
forming at least part of the integrated circuitry;  
an antenna electrically coupled to the transmitter circuitry and configured  
to communicate with the remote interrogator unit; and  
the transmitter circuitry having reconfigurable electrical characteristics, the  
electrical characteristics being reconfigurable to selectively tune at least one of  
the transmitter circuitry and antenna within a range of tuned and detuned states  
to purposely reduce a transmission range of the radio frequency identification  
device.

Claim 55 (previously presented): An adjustable radio frequency  
identification device in accordance with claim 54 wherein the transmitter circuitry  
has a plurality of fixed matching networks and circuitry configured to selectively  
switch one of the fixed matching networks into electrical connection with the  
transmitter circuitry in order to adjust tuning of the transmitter circuitry and the  
antenna.

Claim 56 (previously presented): An adjustable radio frequency identification device in accordance with claim 54 wherein the transmitter circuitry comprises an adjustable circuit element which selectively causes the transmitter circuitry and the antenna to have mismatched impedances.

Claim 57 (previously presented): An adjustable radio frequency identification device for use with a remote interrogator unit, the device comprising:

a semiconductor integrated circuit having integrated circuitry;

an antenna;

transmitter circuitry provided on the integrated circuit and forming at least part of the integrated circuitry, the transmitter circuitry having reconfigurable electrical characteristics, the electrical characteristics being reconfigurable to selectively tune at least one of the transmitter circuitry and antenna within a range of tuned and detuned states to purposely reduce a transmission range of the radio frequency identification device; and

receiver circuitry having electrically reconfigurable electrical characteristics, the electrical characteristics being reconfigurable to selectively tune at least one of the transmitter circuitry and antenna within a range of tuned and detuned states to purposely reduce a reception range of the radio frequency data communication device.

Claim 58 (previously presented): An adjustable radio frequency identification device in accordance with claim 57 wherein the receiver circuitry has a plurality of fixed matching networks and circuitry configured to selectively switch the fixed matching networks in order to adjust tuning of the receiver circuitry and the antenna.

Claim 59 (previously presented): An adjustable radio frequency identification device in accordance with claim 58 wherein the transmitter circuitry has a plurality of fixed matching networks and circuitry configured to selectively switch the fixed matching networks in order to adjust tuning of the transmitter circuitry and the antenna.

Claim 60 (previously presented): An adjustable radio frequency identification device in accordance with claim 57 wherein the receiver circuitry comprises an adjustable circuit element which selectively causes the receiver circuitry and the antenna to have mismatched impedances.

Claim 61 (previously presented): An adjustable radio frequency identification device in accordance with claim 60 wherein the transmitter circuitry comprises an adjustable circuit element which selectively causes the transmitter circuitry and the antenna to have mismatched impedances.

Claim 62 (previously presented): An adjustable radio frequency identification device for use with a remote interrogator unit, the device comprising:

an integrated circuit including receiver circuitry configured to receive an interrogation signal from the interrogator unit;

an antenna electrically coupled to the receiver circuitry, the antenna configured to receive the interrogation signal from the interrogator unit and deliver the interrogation signal to the receiver circuitry; and

the receiver circuitry having reconfigurable electrical characteristics, the electrical characteristics being reconfigurable to selectively tune the at least one of the antenna and the receiver circuitry within a range of tuned and detuned

states to purposely reduce a reception range of the radio frequency identification device.

Claim 63 (previously presented): An adjustable radio frequency identification device in accordance with claim 62 wherein the receiver circuitry has at least one circuit with at least one selectively tunable circuit element electrically reconfigurable to modify the reception range of the receiver circuitry.

Claim 64 (previously presented): An adjustable radio frequency identification device in accordance with claim 63 wherein the at least one circuit comprises a plurality of fixed matching networks and circuitry configured to selectively switch one of the fixed matching networks into electrical connection with the receiver circuitry in order to adjust tuning of the receiver circuitry and the antenna.

Claim 65 (previously presented): An adjustable radio frequency identification device in accordance with claim 63 wherein the at least one circuit comprises an adjustable circuit element which selectively causes the receiver circuitry and the antenna to have mismatched impedances.

Claim 66 (previously presented): An adjustable radio frequency identification device in accordance with claim 63 and further comprising transmitter circuitry having at least one circuit with at least one selectively tunable circuit element electrically reconfigurable to modify the transmission range of the transmitter circuitry.

Claim 67 (previously presented): An adjustable radio frequency identification device in accordance with claim 66 wherein the at least one circuit comprises a plurality of fixed matching networks and circuitry configured to selectively switch one of the fixed matching networks into electrical connection with the transmitter circuitry in order to adjust tuning of the transmitter circuitry and the antenna.

Claim 68 (previously presented): An adjustable radio frequency identification device in accordance with claim 66 wherein the at least one circuit comprises an adjustable circuit element which selectively causes the transmitter circuitry and the antenna to have mismatched impedances.

Claim 69 (cancelled).



Claim 70 (original): The adjustable radio frequency identification device of claim 15 further comprising a power source electrically coupled to the integrated circuitry and configured to generate operating power for the communications device.

Claim 71 (original): The adjustable radio frequency identification device of claim 22 further comprising a battery electrically coupled to the integrated circuit and configured to provide power to the receiver circuitry.

Claim 72 (original): The adjustable radio frequency identification device of claim 54 further comprising a power source electrically coupled to the integrated circuitry and configured to generate operating power for the communications device.

Claim 73 (original): The adjustable radio frequency identification device of claim 57 further comprising a power source electrically coupled to the integrated circuitry and configured to generate operating power for the radio frequency identification device.

Claim 74 (original): The adjustable radio frequency identification device of claim 62 further comprising a battery electrically coupled to the integrated circuit and configured to provide power to the receiver circuitry.